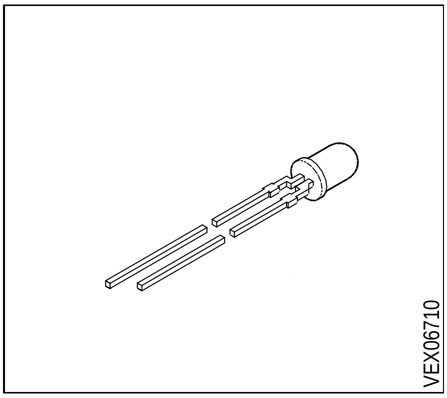
SIEMENS

3 mm (T1) LED, Diffused

LR 3360, LS 3360, LO 3360
LY 3360, LG 3360, LP 3360



Besondere Merkmale

- eingefärbtes, diffuses Gehäuse
- als optischer Indikator einsetzbar
- Lötspieße mit Aufsetzebene
- gegurtet lieferbar
- Störimpulsfest nach DIN 40839

Features

- colored, diffused package
- for use as optical indicator
- solder leads with stand-off
- available taped on reel
- load dump resistant acc. to DIN 40839

Typ Type	Emissionsfarbe Color of Emission	Gehäusefarbe Color of Package	Lichtstärke Luminous Intensity I_F = 10 mA I_V (mcd)	Bestellnummer Ordering Code
LR 3360-DG LR 3360-F LR 3360-G LR 3360-FJ	red	red diffused	0.4 … 3.2 1.0 … 2.0 1.6 … 3.2 1.0 … 8.0	Q62703-Q1316 Q62703-Q1317 Q62703-Q1318 Q62703-Q1319
LS 3360-HL LS 3360-K LS 3360-L LS 3360-KN	super-red	red diffused	2.5 … 20.0 6.3 … 12.5 10.0 … 20.0 6.3 … 50.0	Q62703-Q1320 Q62703-Q1321 Q62703-Q1322 Q62703-Q1323
LO 3360-HL LO 3360-K LO 3360-L LO 3360-JM	orange	orange diffused	2.5 ... 20.0 6.3 ... 12.5 10.0 ... 20.0 4.0 ... 32.0	Q62703-Q1887 Q62703-Q2400 Q62703-Q2596 Q62703-Q2410
LY 3360-HL LY 3360-K LY 3360-L LY 3360-KN	yellow	yellow diffused	2.5 ... 20.0 6.3 ... 12.5 10.0 ... 20.0 6.3 ... 50.0	Q62703-Q1324 Q62703-Q1325 Q62703-Q1326 Q62703-Q1998
LG 3360-HL LG 3360-J LG 3360-K LG 3360-L LG 3360-KN	green	green diffused	2.5 ... 20.0 4.0 ... 8.0 6.3 ... 12.5 10.0 ... 20.0 6.3 ... 50.0	Q62703-Q3818 Q62703-Q1865 Q62703-Q2008 Q62703-Q3507 Q62703-Q3819
LP 3360-GK LP 3360-H LP 3360-J LP 3360-HL	pure green	green diffused	1.6 ... 12.5 2.5 ... 5.0 4.0 ... 8.0 2.5 ... 20.0	Q62703-Q2467 Q62703-Q2914 Q62703-Q2915 Q62703-Q3213

Streuung der Lichtstärke in einer Verpackungseinheit $I_{V\,max} / I_{V\,min} \leq 2.0$.
Luminous intensity ratio in one packaging unit $I_{V\,max} / I_{V\,min} \leq 2.0$.

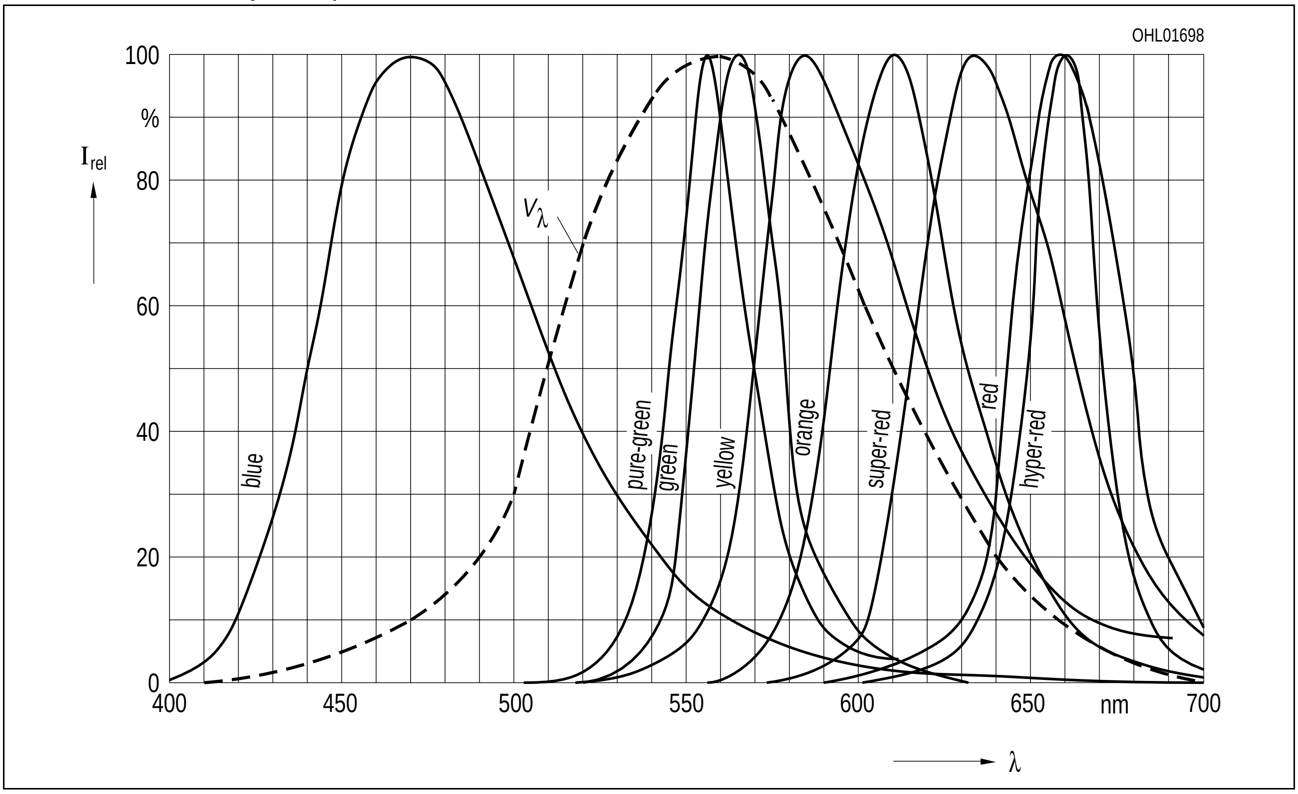
Grenzwerte
Maximum Ratings

Bezeichnung **Parameter**	**Symbol** **Symbol**	**Werte** **Values**			**Einheit** **Unit**
		LS, LO, LY, LG	**LR**	**LP**	
Betriebstemperatur Operating temperature range	T_{op}	– 55 … + 100			°C
Lagertemperatur Storage temperature range	T_{stg}	– 55 … + 100			°C
Sperrschichttemperatur Junction temperature	T_j	+ 100			°C
Durchlaßstrom Forward current	I_F	40	45	30	mA
Stoßstrom Surge current $t \leq 10$ µs, D = 0.005	I_{FM}	0.5			A
Sperrspannung Reverse voltage	V_R	5			V
Verlustleistung Power dissipation $T_A \leq 25$ °C	P_{tot}	140	100	100	mW
Wärmewiderstand Thermal resistance Sperrschicht / Luft Junction / air	$R_{th\ JA}$	400			K/W

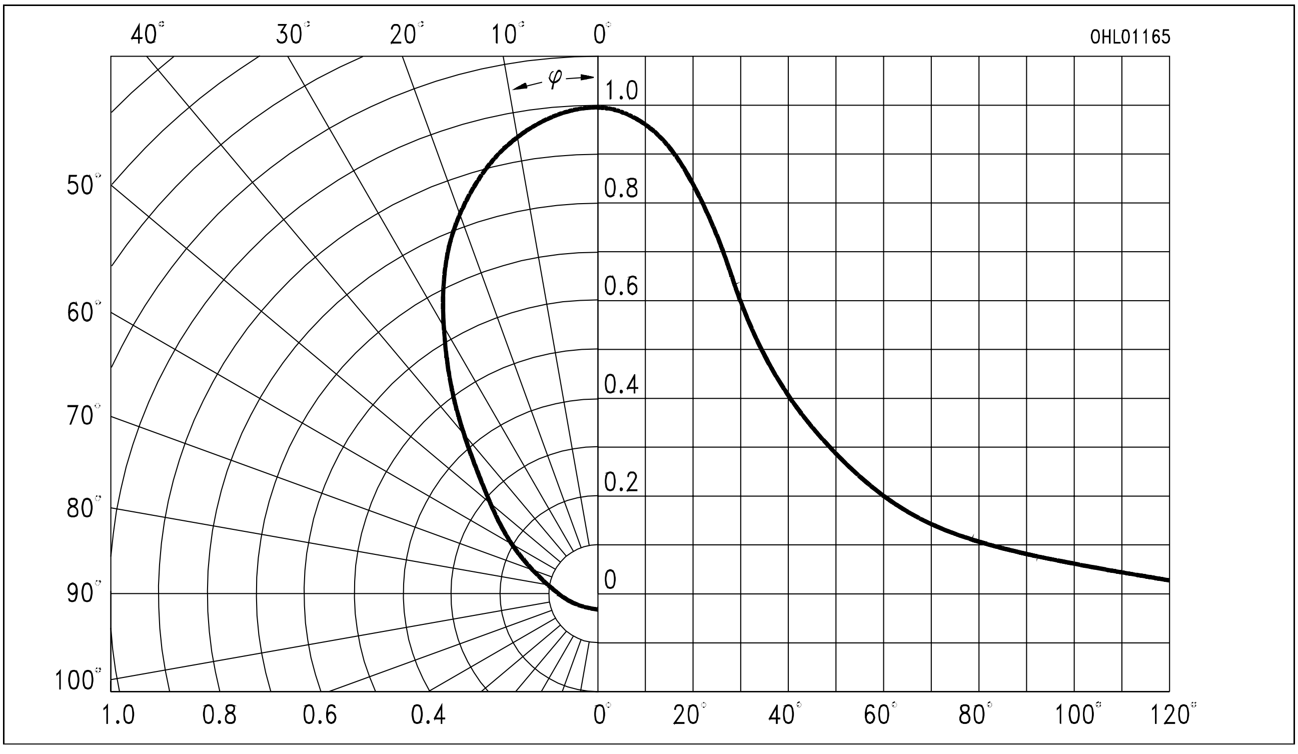
Kennwerte (T_A = 25 °C)
Characteristics

Bezeichnung **Parameter**	**Symbol** **Symbol**	**Werte** **Values**						**Einheit** **Unit**
		LR	**LS**	**LO**	**LY**	**LG**	**LP**	
Wellenlänge des emittierten Lichtes(typ.) Wavelength at peak emission(typ.) I_F = 20 mA	λ_{peak}	660	635	610	586	565	557	nm
Dominantwellenlänge(typ.) Dominant wavelength(typ.) I_F = 20 mA	λ_{dom}	645	628	605	590	570	560	nm
Spektrale Bandbreite bei 50 % $I_{rel\ max}$(typ.) Spectral bandwidth at 50 % $I_{rel\ max}$(typ.) I_F = 20 mA	$\Delta\lambda$	35	45	40	45	25	22	nm
Abstrahlwinkel bei 50 % I_V (Vollwinkel) Viewing angle at 50 % I_V	2φ	70	70	70	70	70	70	Grad deg.
Durchlaßspannung(typ.) Forward voltage(max.) I_F = 10 mA	V_F V_F	1.6 2.0	2.0 2.6	2.0 2.6	2.0 2.6	2.0 2.6	2.0 2.6	V V
Sperrstrom(typ.) Reverse current(max.) V_R = 5 V	I_R I_R	0.01 10	0.01 10	0.01 10	0.01 10	0.01 10	0.01 10	µA µA
Kapazität(typ.) Capacitance V_R = 0 V, f = 1 MHz	C_0	25	12	8	10	15	15	pF
Schaltzeiten: Switching times: I_V from 10 % to 90 %(typ.) I_V from 90 % to 10 %(typ.) I_F = 100 mA, t_P = 10 µs, R_L = 50 Ω	t_r t_f	120 50	300 150	300 150	300 150	450 200	450 200	ns ns

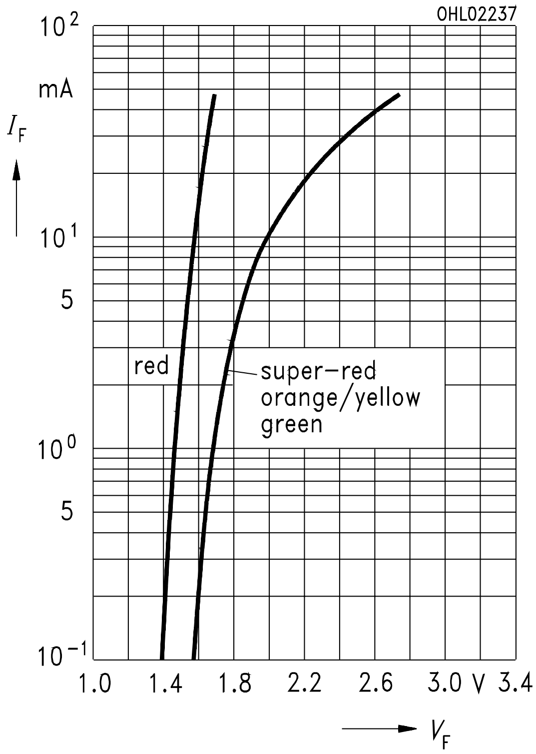
Relative spektrale Emission $I_{rel} = f(\lambda)$, T_A = 25 °C, I_F = 20 mA
Relative spectral emission
V (λ) = spektrale Augenempfindlichkeit
Standard eye response curve



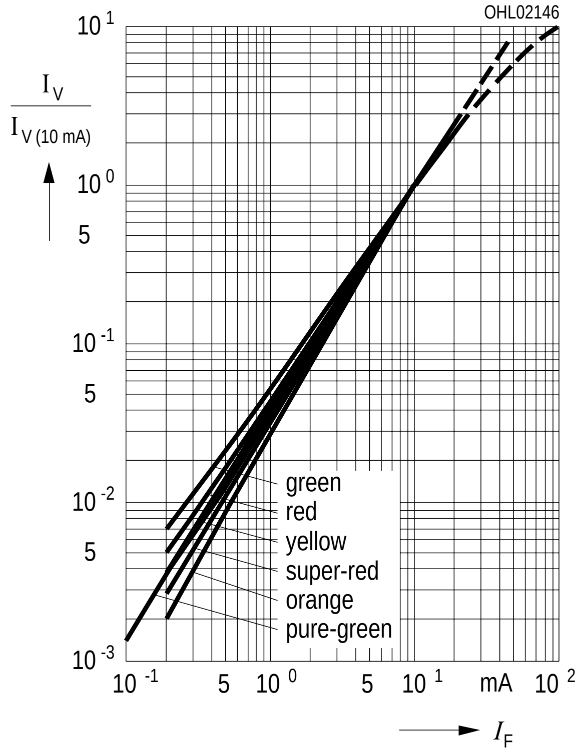
Abstrahlcharakteristik $I_{rel} = f(\varphi)$
Radiation characteristic



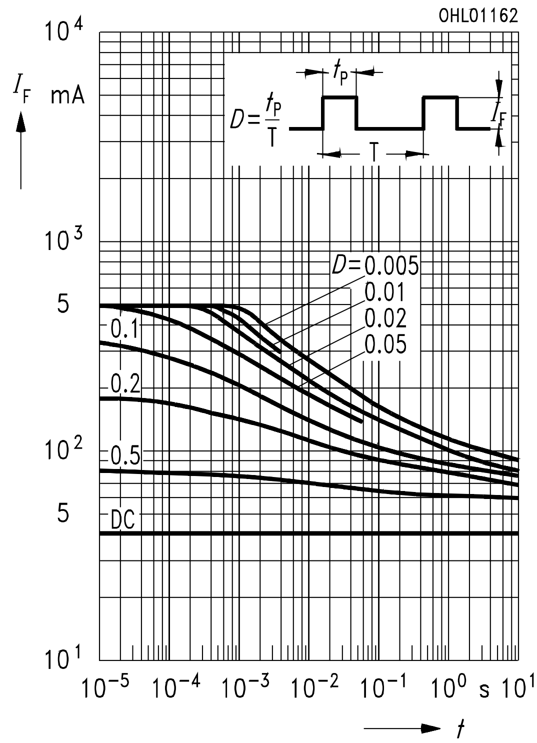
Durchlaßstrom $I_F = f(V_F)$
Forward current
T_A = 25 °C



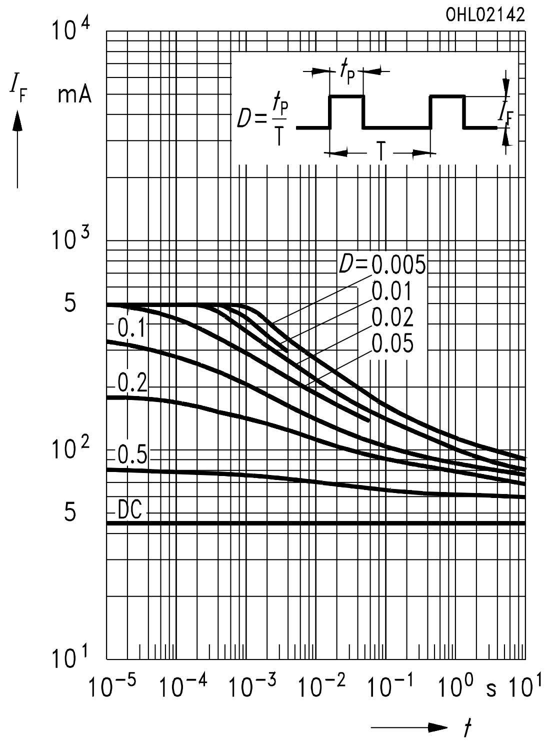
Relative Lichtstärke $I_V/I_{V(10\,mA)} = f(I_F)$
Relative luminous intensity
T_A = 25 °C



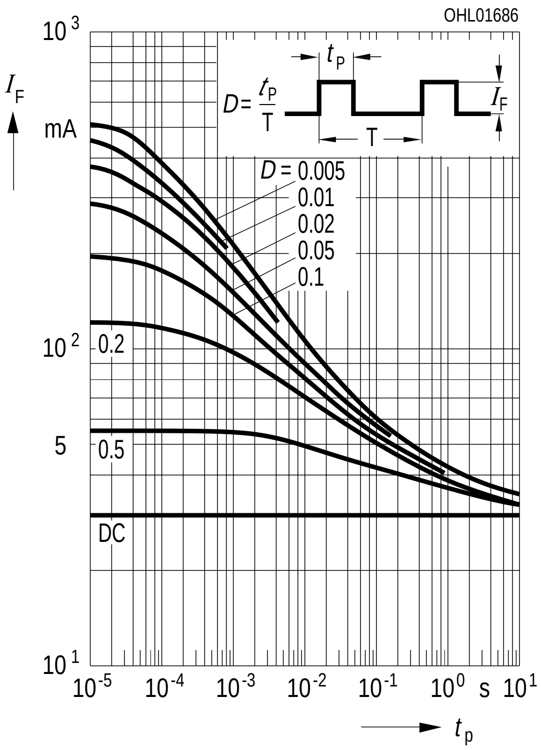
Zulässige Impulsbelastbarkeit $I_F = f(t_P)$
Permissible pulse handling capability
Duty cycle D = parameter, T_A = 25 °C
LS, LO, LY, LG



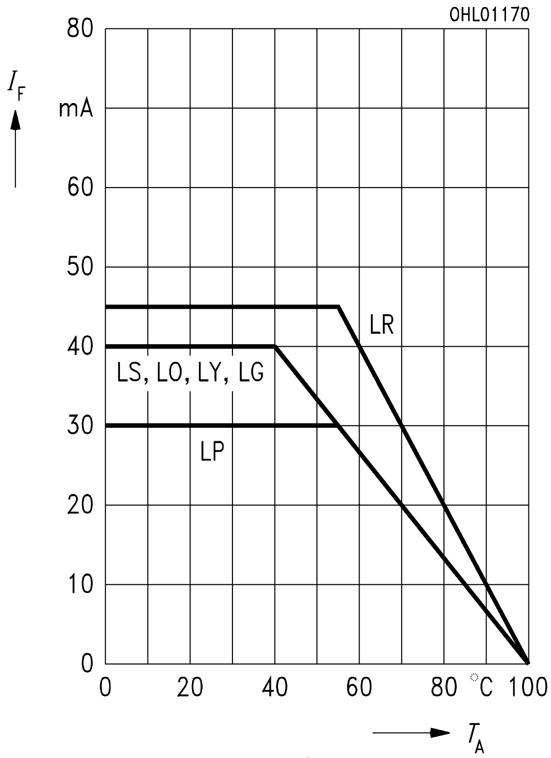
Zulässige Impulsbelastbarkeit $I_F = f(t_P)$
Permissible pulse handling capability
Duty cycle D = parameter, T_A = 25 °C
LR



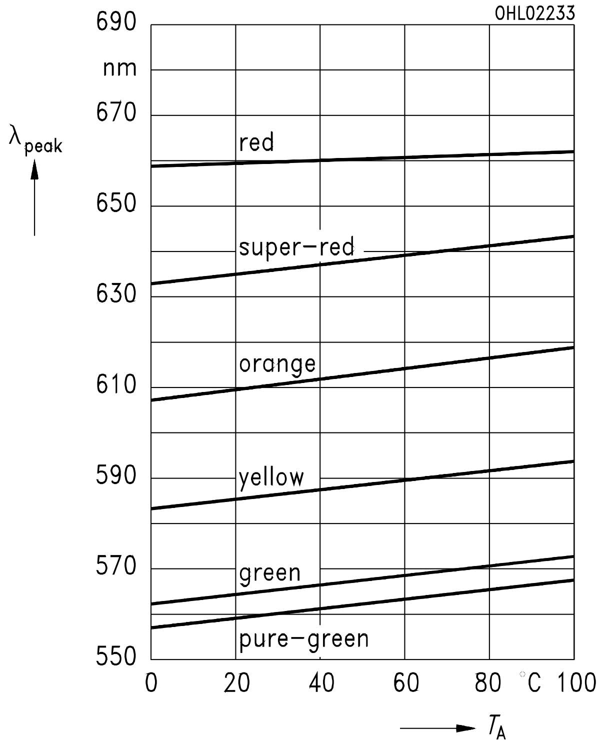
Zulässige Impulsbelastbarkeit $I_F = f(t_P)$
Permissible pulse handling capability
Duty cycle D = parameter, T_A = 25 °C
LP



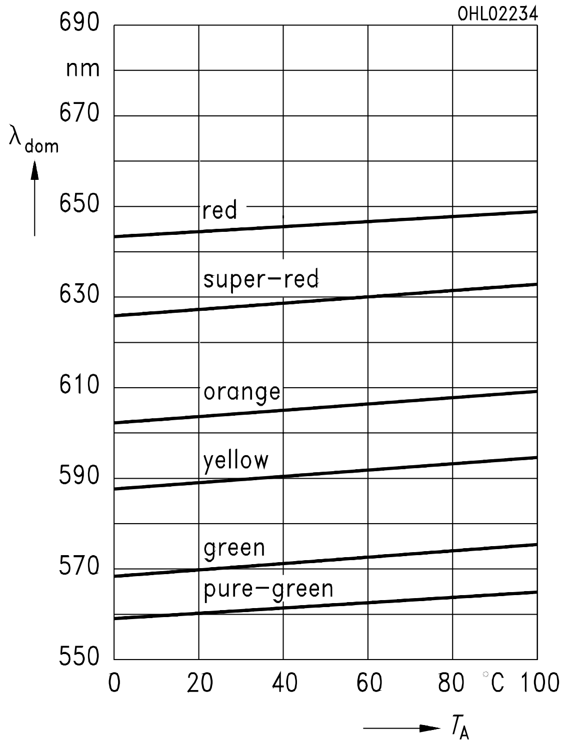
Maximal zulässiger Durchlaßstrom
Max. permissible forward current
$I_F = f(T_A)$



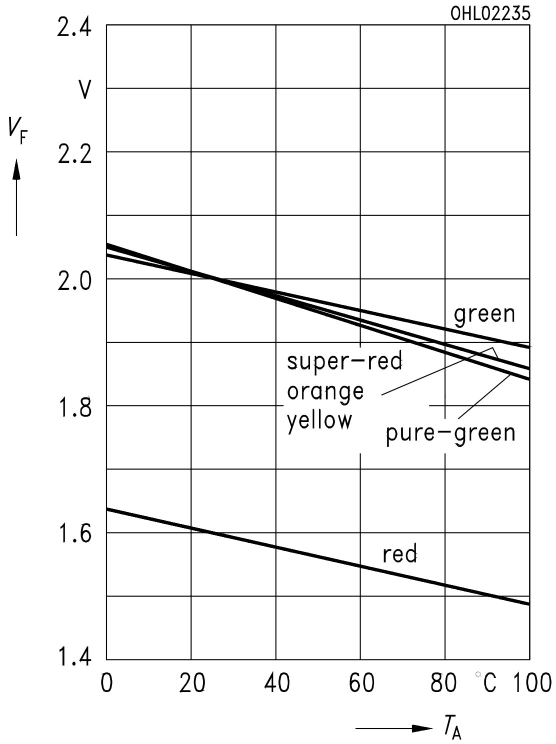
Wellenlänge der Strahlung $\lambda_{peak} = f(T_A)$
Wavelength at peak emission
I_F = 20 mA



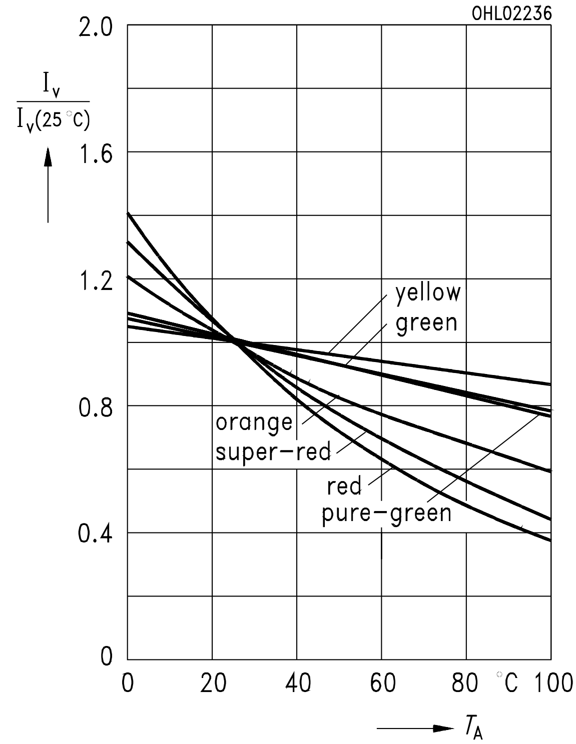
Dominantwellenlänge $\lambda_{dom} = f(T_A)$
Dominant wavelength
I_F = 20 mA



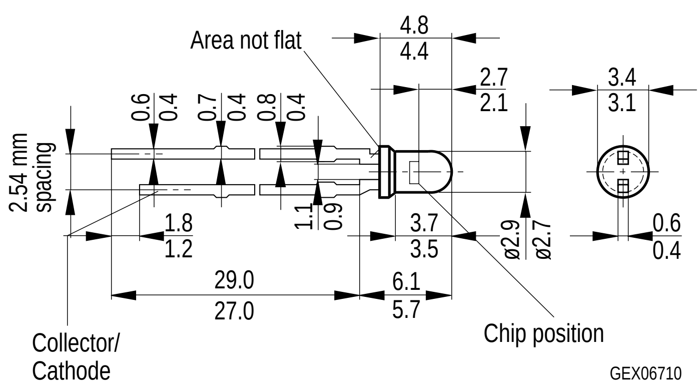
Durchlaßspannung $V_F = f(T_A)$
Forward voltage
I_F = 10 mA



Relative Lichtstärke $I_V/I_{V(25\,°C)} = f(T_A)$
Relative luminous intensity
I_F = 10 mA



Maßzeichnung (Maße in mm, wenn nicht anders angegeben)
Package Outlines (Dimensions in mm, unless otherwise specified)



Kathodenkennzeichnung: Kürzerer Lötspieß
Cathode mark: Short solder lead